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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,248	07/25/2005	Philip A. Block	60285-USA1	6684
<div>7590      10/10/2007</div> <div>John M Sheehan FMC Corporation 1735 Market Street Philadelphia, PA 19103</div>				
<div>EXAMINER</div> <div>LAWRENCE JR, FRANK M</div>				
<div>ART UNIT      PAPER NUMBER</div> <div>1797</div>				
<div>MAIL DATE      DELIVERY MODE</div> <div>10/10/2007      PAPER</div>				

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/518,248

Applicant(s)

BLOCK ET AL.

Examiner

Frank M. Lawrence

Art Unit

4724 1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date (2).
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: A period should be inserted at the end of line 30 on page 4.

Appropriate correction is required.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-7, 9-12 and 14-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 14, 15 and 17-24 of copending Application No. 10/565,564. Although the conflicting claims are not identical, they are not patentably distinct from each other because the co-pending claims encompass and envision all of the limitations of the instant claims. One having ordinary skill in the art would

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understand that the composition would function to oxidize contaminants without the inclusion of hydrogen peroxide and that the composition can be used in effective amounts.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 16-22 and 27-30 of copending Application No. 10/518,249. Although the conflicting claims are not identical, they are not patentably distinct from each other because the co-pending claims encompass and envision all of the limitations of the instant claims. One having ordinary skill in the art would understand that the composition would function to oxidize contaminants without the inclusion of a pH modifying agent, that the composition can be used in effective amounts, and that iron and EDTA can be used as common catalyst and chelating agents.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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6. Claims 1-5, 9-11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Newton (5,700,107).

7. Newton '107 teaches a method of soil remediation comprising adding a complexing agent that includes a chelating agent, a salt such as one of the chlorides of iron, and a persulfate such as sodium persulfate to remove pesticides and other contaminants (abstract, col. 1, lines 52-67, col. 2, lines 24-49, col. 4, lines 1-16).

8. Claims 1-3, 9, 10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Vineyard (6,576,144).

9. Vineyard '144 teaches a method for oxidizing contaminants in wastewater, comprising adding hydrogen peroxide, divalent iron, and EDTA (see col. 2, lines 16-28, col. 4, lines 55-62, col. 5, lines 17-47).

10. Claims 1-3 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Watts et al. (5,741,427).

11. Watts et al. '427 teach a method for the remediation of soil or groundwater comprising adding a peroxide and a Fe(II) EDTA chelate or Fe(III) salt to remove pesticides and other contaminants (see abstract, col. 3, lines 30-46, col. 4, lines 12-51, claims 1, 3).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 6-8 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newton '107.

14. Newton '107 discloses all of the limitations of the claims except that the peroxygen compound is a sodium or potassium monopersulfate or a combination of di- and monopersulfate, and that preferred amounts of chelating agent and peroxygen compounds are used. It is submitted that one having ordinary skill in the art would know to use any available persulfate that is known in the art to be capable of oxidizing contaminants in soil based on the teaching of a sodium persulfate in the patent. Also, the amounts of peroxygen and chelating agents are considered to be parameters that would have been routinely optimized by one having ordinary skill in the art at the time of the invention based on the nature of contamination and the desired level of decontamination.

15. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newton '107 in view of Hoag et al. (6,019,548).

16. Newton '107 discloses all of the limitations of the claim except that the chelating agent, transition metal, and peroxygen compound are added sequentially. Hoag et al. '548 disclose an in situ treatment method for soil remediation, comprising adding permanganate and persulfate to the soil either sequentially or together as an aqueous solution (see abstract). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the process of Newton '107 by adding the components sequentially in order to provide a method of treatment in the situation where a premix is costly or not readily available.

*Conclusion*

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose soil remediation methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frank M. Lawrence  
Primary Examiner  
Art Unit 1724

*frank lawrence*  
8-23-07